# Vital Spots 10<sup>th</sup> to 1<sup>st</sup> Gup Techniques



Neill Livingstone 6th Dan Thesis

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Offered as a thesis towards testing to 6<sup>th</sup> Dan

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As a practitioner, Instructor and grading examiner of General Choi Hong Hi's Taekwon-Do I feel that it is important that all students from an early stage of their training have an understanding of applying the correct attacking tool to the correct vital spot. For the beginning student the condensed encyclopaedia of Taekwon-Do contains more information than is needed. It is hoped that this thesis will be of help in the understanding of the techniques being learned; the correct application of the techniques and the damage that can be caused if applied correctly. Another benefit of having an understanding of the above will also ensure that excessive force is not used when applying the learnt Taekwon-Do techniques in a real life situation.

Whilst preparing for the writing of this thesis 2 Quotes from the condensed encyclopaedia came to mind.

1. Although the practice of Taekwon-Do offers many benefits both physically and mentally the utmost purpose of Taekwondo is to eliminate fighting by discouraging the stronger's oppression of the weaker with a power that must be based on humanity, justice, morality, *wisdom* and faith, thus helping to build a better and more peaceful world.

Having the wisdom in regards to applying a technique to the correct vital spot will give the practitioner of Taekwon-Do a power over the stronger's oppression of the weaker.

2. On July 1<sup>st</sup> 1985 it was decided by a special meeting of directors that the Taekwon-Do belt should be wrapped around the waist only once instead of twice as previously practiced.

One or II, as in once around the waist symbolizes:

Ohdoikwan (pursue one goal whatsoever, once it is determined)
Ilpyondanshim (serve one master with unshakable loyalty)
Ilkokpilsung (gain victory with one blow)

General Choi Hong Hi's encyclopaedia "Taekwon-Do" (The Korean Art of Self Defence)

Having an understanding of the correct vital spot when applying a particular Taekwon-Do technique and the damage it will cause ensures that victory will be gained with one blow.

#### **Theory of Power**

The theory of power is a very important aspect when applying a technique to the correct vital spot. Having the tools (e.g. a fore fist punch) and the knowledge of the vital spot that it is applied to are not nearly enough. Students must also have an understanding of the theory of power so that the technique can be applied to its fullest potential. As training in Taekwon-Do progresses the students understanding of the theory of power will improve. For example: the Taekwon-Do student with one to two years training can be seen to break two 2.5cm thick boards with a chosen technique. However a student with say ten years training can break four to five of the equivalent boards.

#### THEORY OF POWER - (Him Ui Wolli)

The beginning student may ask; "Where does one obtain the power to create the devastating results attributed to Taekwon-Do?" This power is attributed to the utilization of a person's full potential through the mathematical application of Taekwon-Do techniques. The average person uses only 10 to 20 percent of his potential. Anyone, regardless of size, age, or sex who can condition himself to use 100 percent of his potential can also perform the same destructive techniques.

Though training will certainly result in a superb level of physical fitness, it will not necessarily result in the acquisition of extraordinary stamina or superhuman strength. More important, Taekwon-Do training will result in obtaining a high level of reaction force, concentration, equilibrium, breath control and speed; these are the factors that will result in a high degree of physical power.

#### **REACTION FORCE (Bandong Ryok)**

According to Newton's Law, every force has an equal and opposite force. When an automobile crashes into a wall with the force of 2,000 pounds, the wall will return a force of 2,000 pounds; or forcing the end of the seesaw down with a ton of weight will provide an upward force of the same weight; if your opponent is rushing towards you at a high speed, by the slightest blow at his head,

the force with which you strike his head would be that of his own onslaught plus that of your blow.

The two forces combined; his, which is large, and yours, which is small is quite impressive. Another reaction force is your own. A punch with the right fist is aided by pulling back the left fist to the hip.

#### **CONCENTRATION (Jip Joong)**

By applying the impact force onto the smallest target area, it will concentrate the force and therefore, increase its effect. For example, the force of water coming out of a water hose is greater if the orifice is smaller. Conversely, the weight of a man spread out on snow shoes makes hardly any impression on the snow. The blows in Taekwon-Do are often concentrated onto the edge of the open palm or to the crook of the fingers.

It is very important that you should not unleash all your strength at the beginning but gradually, and particularly at the point of contact with your opponent's body, the force must be so concentrated as to give a knock-out blow. That is to say, the shorter the time for the concentration, the greater will be the power of the blow. The utmost concentration is required in order to mobilize every muscle of the body onto the smallest target area simultaneously.

In conclusion, concentration is done in two ways: one is to concentrate every muscle of the body, particularly the bigger muscles around the hip and abdomen (which theoretically are slower than the smaller muscles of other parts of the body) towards the appropriate tool to be used at the proper time; the second way is to concentrate such mobilized muscles onto the opponent's vital spot. This is the reason why the hip and abdomen are jerked slightly before the hands and feet in any action, whether it be attack or defence. Remember, jerking can be executed in two ways: laterally and vertically.

#### **EQUILIBRIUM** (Kyun Hyung)

Balance is of utmost importance in any type of athletics. In Taekwon-Do, it deserves special consideration. By keeping the body always in equilibrium, that is, well balanced, a blow is more effective and deadly. Conversely, the unbalanced one is easily toppled. The stance should always be stable yet flexible, for both offensive and defensive movements.

Equilibrium is classified into both dynamic and static stability. They are so closely interrelated that the maximum force can only be produced when the static stability is maintained through dynamic stability.

To maintain good equilibrium, the centre of gravity of the stance must fall on a straight line midway between both legs when the body weight is distributed equally on both legs, or in the centre of the foot if it is necessary to concentrate the bulk of body weight on one foot. The centre of gravity can be adjusted according to body weight. Flexibility and knee spring are also important in maintaining balance for both a quick attack and instant recovery. One additional point; the heel of the rear foot should never be off the ground at the point of impact. This is not only necessary for good balance but also to produce maximum power at the point of impact.

#### **BREATH CONTROL (Hohup Jojul)**

Controlled breathing not only affects one's stamina and speed but can also condition a body to receive a blow and augment the power of a blow directed against an opponent. Through practice, breath stopped in the state of exhaling at the critical moment when a blow is landed against a pressure point on the body can prevent a loss of consciousness and stifle pain. A sharp exhaling of breath at the moment of impact and stopping the breath during the execution of a movement tense the abdomen to concentrate maximum effort on the delivery of the motion, while a slow inhaling helps the preparation of the next movement. An important rule to remember; Never inhale while focusing a block or blow against an opponent. Not only will this impede movement but it will also result in a loss of power.

Students should also practice disguised breathing to conceal any outward signs of fatigue. An experienced fighter will certainly press an attack when he realizes his opponent is on the point of exhaustion. One breath is required for one movement with the exception of a continuous motion.

#### MASS (Zilyang)

Mathematically, the maximum kinetic energy or force is obtained from maximum body weight and speed and it is all important that the body weight be increased during the execution of a blow. No doubt the maximum body weight is applied with the motion of turning the hip. The large abdominal muscles are twisted to provide additional body momentum. Thus the hip rotates in the same direction as that of the attacking or

blocking tool. Another way of increasing body weight is the utilization of a springing action of the knee joint. This is achieved by slightly raising the hip at the beginning of the motion and lowering the hip at the moment of impact to drop the body weight into the motion. In summarizing, it is necessary to point out that the principles of force outlined here hold just as true today in our modern scientific and nuclear age as they did centuries ago.

I am sure that when you go through this art, both in theory and in practice, you will find that the scientific basis of the motions and the real power which comes out a small human body cannot fail to impress you.

#### SPEED (Sokdo)

Speed is the most essential factor of force or power. Scientifically, force equals mass multiplied by acceleration.

$$(F = MA) \text{ or } (P = MV_2)$$

According to the theory of kinetic energy, every object increases its weight as well as speed in a downward movement. This very principle is applied to this particular art of self-defence. For this reason, at the moment of impact, the position of the hand normally becomes lower than the shoulder and the foot lower than the hip while the body is in the air.

Reaction force, breath, control, equilibrium, concentration, and relaxation of the muscles cannot be ignored. However, these are the factors that contribute to the speed and all these factors, together with flexible and rhythmic movements, must be well coordinated to produce the maximum power in Taekwon-Do.

General Choi Hong Hi's encyclopaedia "Taekwon-Do" (The Korean Art of Self Defence)

#### Vital Spots

A vital spot in Taekwondo is defined as any sensitive or breakable area on the body vulnerable to an attack. It is essential that a student of Taekwondo has knowledge of the different spots so that he can use the proper attacking or blocking tool. Indiscriminate attack is to be condemned as it is inefficient and wasteful of energy. The student should realize that in order to cause a significant injury different force may be necessary at different vital spots. For example, small force will cause a great damage if it is applied to the neck. On the other hand, the front of the abdomen, if appropriately strengthened, can withstand large force without significant injury to the internal organs. Vital spots can be divided into two groups. Major: Injury to these can lead to death or permanent disability. Minor: Injury to these is not life threatening but will cause pain and temporary disability. For the sake of simplicity, the human body can be divided into five groups: the head, chest, abdomen, external genitalia, and the four extremities.

#### The Head (Mori)

The bone structure of the head is composed of the skull which protects the contents of the head. The skull itself is composed of 28 bones, eight of which protect and house the brain. The eyes are set deep in their sockets and thus they are well protected against hand or foot blows, except when attacked by fingers or toes, both of which can cause very serious damage indeed. The nose is composed of a bony part (the bridge of the nose) and the cartilage (the tip of the nose). A blow to the nose can result in fracture (break) and/or troublesome bleeding. Neither of these is usually serious. The mouth is formed by the maxilla into which are set the upper teeth, and the mandible (the jaw) into which are set the lower teeth. The floor of the mouth is filled by the tongue. The lips form the outside covering of the teeth. The upper lip has a groove in the midline called the philtrum (it is of no significance, except as a guiding point). Injuries to the mouth commonly result in broken teeth, bitten lips or tongue and uncommonly, broken bones. Ears can be divided into the outer and inner portions. The outer portion we can see, the inner we cannot. Injury to the outer portion commonly results in swelling or bleeding. This is rarely serious. However, a blow over the ear canal, which leads to the inner portion of the ear, may result in the rupture of the tympanic membrane and thus cause severe pain and temporary deafness. It is most important to realize that a blow to any part of the head, if severe enough, will result in unconsciousness. This must be seen as a serious injury always because even though this may only be a minor concussion, it may also be a sign of impending death.

#### The Neck (Mok)

The neck can be seen as a connecting stem between the head, the brain and the rest of the body. It functions as a support of the head as well as a conduit. The support is accomplished by the cervical (neck) spine This is the first part of 1he vertebral column (back bone). The other parts are: thoracic (chest) spine, lumbar (abdominal) spine, sacral (the part between the two hip bones) spine and the coccyx. The cervical spine consists of seven vertebrae. Inside of the vertebrae is a canal which contains the spinal cord. The nerves going to the rest of the body exit from the spinal cord between two neighbouring vertebrae. Injuries to any part of the spine can lead to the fracture of a vertebra which if displaced will lead to compression or transaction of nerves on the spinal cord. This in turn may result in paralysis of the muscles or the part of the body innervated by the nerve or the spinal cord. The conduit part lies in front of the cervical spine. In front of this lies the larvnx and the trachea (Adam's apple and the wind pipe) which bring air to the lungs. Behind lies the oesophagus (food pipe) which brings food to ihe stomach On the side of these are located carotid arteries (one on each side) which take blood from the heart to the brain. Injury to the larynx, trachea or carotid arteries is extremely serious and can lead to rapid death. Injuries to the oesophagus are very rare, except with a knife or gunshot wound to the neck.

#### The Chest (Gasum)

The chest is composed of the chest wall, lungs, heart, aorta and vena cava (the big vessels which take blood to and from the heart). These give excellent protection to the internal organs they surround. Consequently, the lungs, the heart or the blood vessels are only rarely injured in taekwondo. It should be noted that the thoracic spine running through the middle of the back of the chest is very vulnerable to direct blows. A blow to the breast of a woman will cause excruciating pain but serious damage is most unusual.

#### The Abdomen (Bokboo)

The abdomen is a cavity containing many organs. It is formed by the diaphragm above and the pelvic diaphragm below. It is surrounded by the abdominal wall in front and on the sides. The back of the abdomen is formed by the lumbar spine and the paraspinal muscles. It should be realized that the lumbar spine, which is composed of 5 vertebrae, is the only solid support the abdomen has. Injury to the spine will result in leg pain or paralysis of the legs. Injury to the paraspinal muscles will cause back pain which may be disabling for many months or years. Solid organs of the abdomen are the liver, spleen, pancreas and kidneys. A direct blow to these may result in their rupture and lifethreatening bleeding. The stomach and the intestines are never injured except with knife or gunshot wounds. A blow to the solar plexus is very disabling momentarily but with no long term consequences. In women, blows to the external genitalia are very painful but without serious sequela. In men, the situation is quite different. A blow to the genitalia can cause bleeding inside the testicles and subsequent inability to have children. It is evident that very serious consequences may accompany such a blow.

#### The Extremities (Pal Gwa Dari)

The extremities (Pal Gwa Dari) The arms are joined to the rest of the body by the clavicle and the shoulder blades. Injury to these is not usually serious. The shoulder can be easily dislocated and cause compression of the nerves and vessels that pass to the arm through the axilla (armpit). Note that the axilla is not protected whenever the arm is lifted. On the inner side of the elbow passes the ulnar nerve. It is very vulnerable to injury at this point. Fractures of the wrist or hand may not appear serious but may cause severe long term disability. The knees are very vulnerable to an attack from the side. Note that once a broken knee, forever a weak knee. Tibias (shins) are easily injured however, disability is temporary. All students should understand basic first aid including artificial respiration so it can be administered if needed. In the case of an internal injury, it is important to lay the injured party down quietly and check the party's complexion, state of consciousness, pulse and respiration. Do not move the body in any way and call a doctor immediately. Never make the patient walk or jump. It may aggravate any internal haemorrhage.

Reference: General Choi Hong Hi's encyclopaedia "Taekwon-Do" (The Korean Art of Self Defence)

#### Vital Spots And Sections Of the Body

Taekwon-Do training is characterized by its lack of contact. Patterns and many other attack and defence exercises are practised alone against an imaginary opponent. Even sparring is conducted without actually striking or grasping an opponent's body. Under these circumstances it would be extremely difficult, if not impossible, to specify the particular vital spot to be attacked. Furthermore, it would be almost impossible to standardize the location of the hand or foot of the student for attack or defence. To alleviate these problems, the human body has been imaginarily divided into three sections. The high, above the neck; the middle between the shoulders and umbilicus; and the low below the umbilicus. Within these areas are a number of vital spots. In each area, the most accessible vital spot is used to categorize each section: i.e. philtrum for high, solar plexus for middle, and groin for low.

Reference: General Choi Hong Hi's encyclopaedia "Taekwon-Do" (The Korean Art of Self Defence)



High Section (Nopun Bubun)

Middle Section (Kaunde Bubun)

Low section (Najun Bubun)

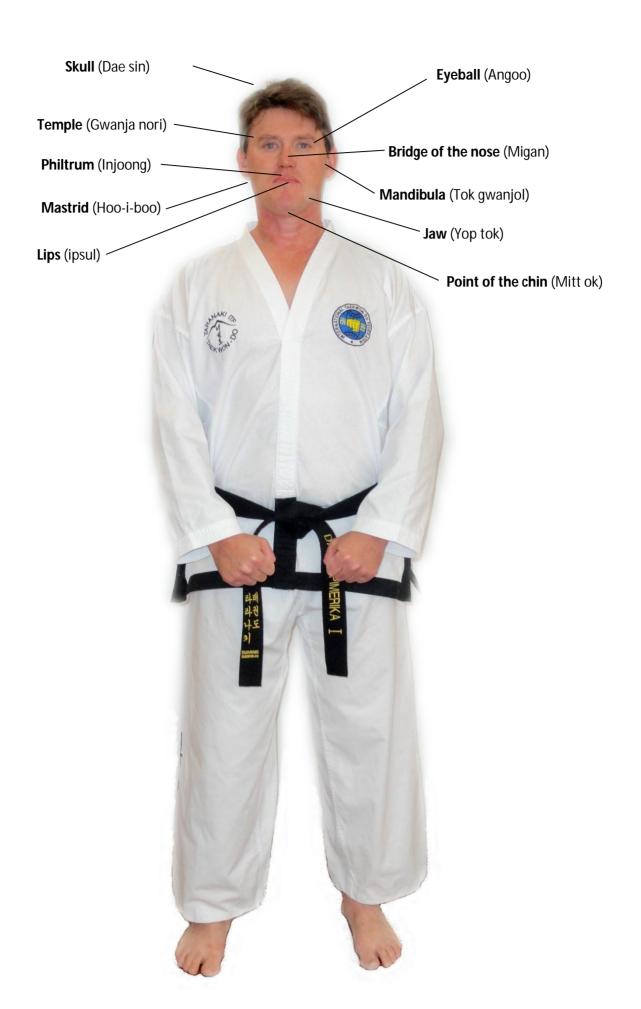


In addition to high, middle and low sections of the body, it is further divided laterally into solar plexus, chest and shoulder line.

A – Solar plexus line

B – Chest line

C – Shoulder line











# 10<sup>th</sup> Gup to 1<sup>st</sup> Gup Grading Techniques Syllabus: Attacking tools & vital spots:

The vital spots listed for the following techniques are based upon the attacker and opponent being of the same height. Where the attacker and opponent are of different heights more vital spots may become available and this also applies to ground techniques.

Students of Taekwon-Do should become familiar with the vital spots for each attacking tool.

Fore fist

Back fist

Side fist

Knee

Knifehand	
Reverse Knifehand	
Fingertip	
Ball of the foot	
Back sole	
Foot sword	
Back heel	
Instep	

Refer to pages 52 and 53 of this thesis for this information.

### 10<sup>th</sup> Gup – Forefist Punch



### 10<sup>th</sup> Gup – Front Snap Kick



### 9<sup>th</sup> Gup – Flat Fingertip Thrust



Example: Flat fingertip thrust attacking the philtrum.

### 9<sup>th</sup> Gup – Side Front Snap Kick



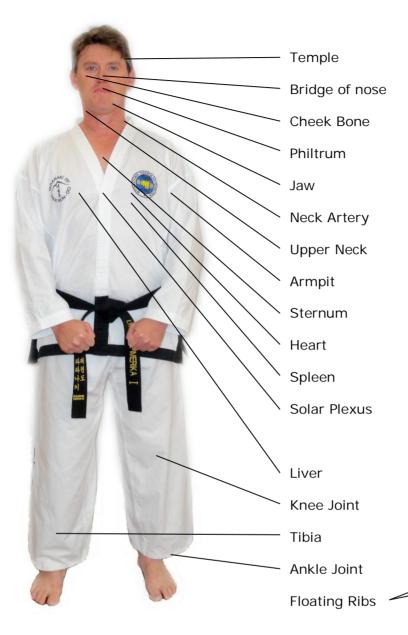
### 9<sup>th</sup> Gup – Turning Kick



### 8<sup>th</sup> Gup – Knifehand Side Strike



### 8<sup>th</sup> Gup – Side Piercing Kick



Note: Without a doubt, this is one of the most effective techniques for attacking an opponent at the flank. The foot sword is employed as the attacking tool.



### 7<sup>th</sup> Gup – Back Fist High Side Strike



### 7<sup>th</sup> Gup – Straight Fingertip Thrust



Example: Straight fingertip thrust attacking the solar plexus

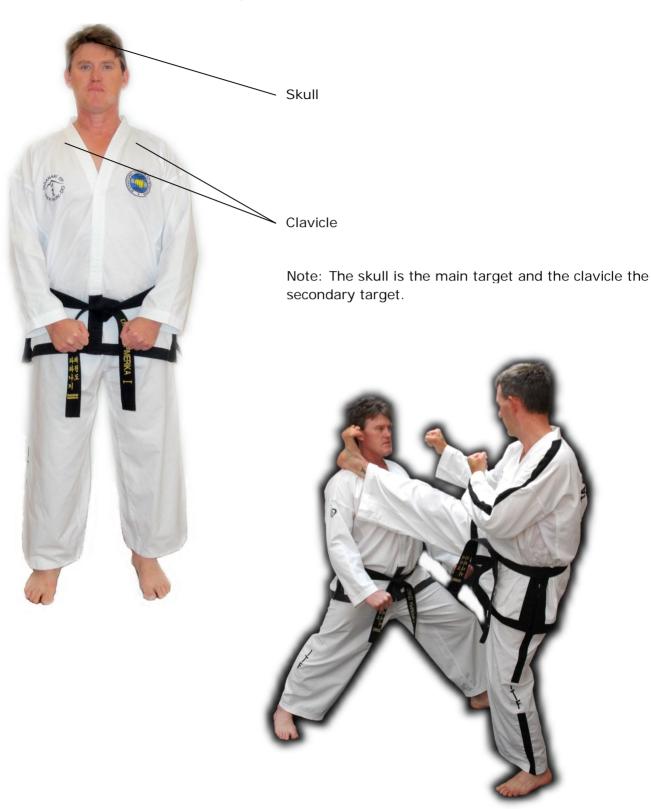
### 7<sup>th</sup> Gup – Back Piercing Kick



Note: This kick is quite effective for attacking an opponent approaching from the rear. The footsword is used as the attacking tool



## 7<sup>th</sup> Gup – Downward Kick



Example: Downward kick attacking the clavicle

### 7<sup>th</sup> Gup – Reverse Turning Kick



### 6<sup>th</sup> Gup – Knifehand Inward Strike



Upper Neck

Neck Artery

Adams Apple

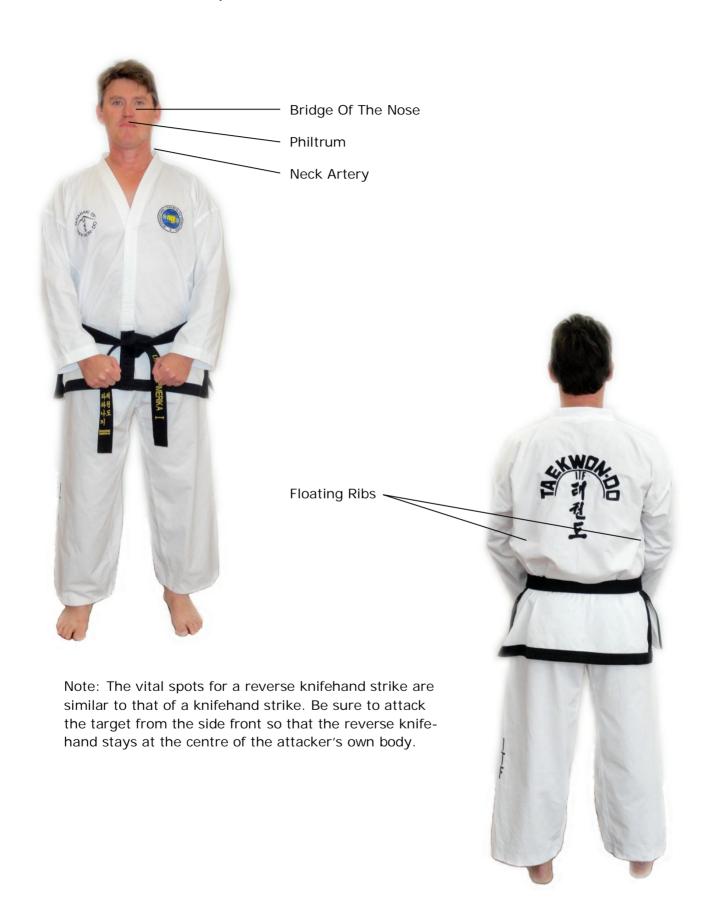
Windpipe

Note: A knifehand inward strike can be executed from nearly all stances, though walking, rear foot and L-stances are mainly used.



Example: Knifehand inward strike attacking the neck artery

### 6<sup>th</sup> Gup – Reverse Knifehand Strike



### 6<sup>th</sup> Gup – Vertical Kick



Example: Vertical kick attacking the solar plexus.

### 6<sup>th</sup> Gup – Pick Shape Kick



Example: Pick shape kick attacking the chest.

### 6<sup>th</sup> Gup – Twisting Kick



### 6<sup>th</sup> Gup – Reverse Hooking Kick



# 5<sup>th</sup> Gup – Front Elbow Strike



Example: Front elbow strike attacking the jaw.

# 5<sup>th</sup> Gup – Back Snap Kick



#### Scrotum

Note: This technique is especially useful in attacking the opponent who is to the rear. The back heel is the attacking tool.



Example: Back snap kick attacking the scrotum.

# 5<sup>th</sup> Gup – Side Pushing Kick



Example: Side pushing kick being employed to push the opponent away.

# 4<sup>th</sup> Gup – Upper Elbow Strike



Point Of The Chin

Note: This technique is usually executed in the form of a reverse strike in a walking stance. At the moment of impact the body becomes full facing with the back fist facing upward.



Example: Upper elbow strike attacking the point of the chin.

# 4<sup>th</sup> Gup – Twin Vertical Punch



Example: Twin vertical punch attacking the jaw.

# 4<sup>th</sup> Gup – Twin Upset Punch



Epigastrium

Floating Ribs

Note: A twin upset punch is useful for attacking two targets simultaneously.



Example: Twin upset punch attacking two targets.

# 4<sup>th</sup> Gup – Angle Punch



# 3rd Gup – Upset Fingertip Thrust



Armpit

Pubic Region

Note: An upset fingertip thrust is used chiefly against the pubic region and occasionally the armpit.





Example above: Upset fingertip thrust attacking the pubic region.

Example left: Upset fingertip thrust attacking the armpit.

# 3rd Gup – Twin Side Elbow Thrust



Example: A twin side elbow strike attacking the solar plexus of two opponents.

## 3rd Gup – Upward Kick



Example: Upward kick attacking the solar plexus

# 2nd Gup – Upward Punch



Face

Point of the Chin

Note: This technique is chiefly used for attacking the face or the point of the chin at close range.



Example: Upward punch attacking the point of the chin.

### 2nd Gup - Knifehand Downward Strike



#### Clavicle

Note: The attacking tool reaches the target in a circular motion and can executed from all stances, though L-, rear foot, vertical and X-stances are most suitable.



Example: Knifehand downward strike attacking the clavicle.

# 2nd Gup – Side Elbow Thrust



Solar Plexus

Note: A side elbow thrust is chiefly performed in L-and rear foot stances. Be sure to pull the opposite fist to the hip while thrusting.



Example: Side elbow thrust attacking the solar plexus.

### 1st Gup - Downward Punch



Face

Note: A downward punch is delivered vertically toward the ground or floor. This technique is used for attacking an opponent who has fallen down.



Example: Downward punch attacking the face (Jaw).

### 1st Gup - Knifehand High Front Strike



Upper Neck

**Neck Artery** 

Adams Apple

Windpipe

Note: A Knifehand high front strike is similar to that of an Inward knifehand strike. The difference being that it is executed full facing and the reaction hand is placed open above the head opposed to being pulled back on the hip.



Example: Knifehand high front strike attacking the neck artery.

### Relation of Attacking Tools & Vital Spots

### Fore fist

Philtrum, Sternum, Solar Plexus, Jaw, Point Of Chin, Floating Ribs, Epigastrium, Mandible, Heart, Spleen, Liver, Lower Abdomen.

### **Back fist**

Skull, Temple, Philtrum, Forehead, Floating Ribs, Epigastrium, Lower Abdomen, Occiput.

### Side fist

Skull, Floating Ribs, Epigastrium, Lower Abdomen, Occiput, Shoulder Joint, Elbow Joint.

### **Knifehand**

Skull, Neck Artery, Bridge Of The Nose, Temple, Philtrum, Clavicle, Shoulder, Floating Ribs.

### **Reverse Knifehand**

Neck, Point Of The Chin, Temple, Philtrum, Floating Ribs, Angle Of The Mandible.

### **Fingertip**

Eyes, Philtrum, Adams Apple, Windpipe, Armpit, Solar plexus, Abdomen, Pubic region.

### Ball of the foot

Groin, Bridge Of The Nose, Lower Abdomen, Solar Plexus, Epigastrium, Inner Thigh, Scrotum, Face, Sternum, Philtrum, Heart, Spleen, Floating Ribs, Liver, Temple, Coccyx.

**Back sole**, Against an opponent in a fallen down position.

Lower Abdomen, Solar Plexus, Epigastrium, Sternum, Philtrum, Heart, Spleen, Liver, Temple, Neck Artery, Coccyx, Instep.

### **Foot sword**

Bridge Of Nose, Solar Plexus, Philtrum, Heart, Spleen, Floating Ribs, Liver, Temple, Neck Artery, Armpit, Knee Joint, Ankle Joint, Upper Neck, Tibia, Face.

### **Back heel**

Chest, Skull, Philtrum, Temple, Solar Plexus, Sternum, Heart, Spleen, Liver, Epigastrium, Lower Abdomen, Floating Ribs.

### <u>Instep</u>

Philtrum, Scrotum, Lower Abdomen, Floating Ribs, Jaw, Face.

### **Knee**

Philtrum, Solar Plexus, Scrotum, Epigastrium, Lower Abdomen, Coccyx.

With thanks to General Choi Hong Hi for the gift of Taekwon-Do.
To Master Moore and Worldwide Taekwon-Do for their support of the Taranaki Taekwon-Do club.
To the Black Belts and students of Taranaki Taekwon-Do, I thank you for your loyalty and commitment to the art. You all inspire me to become a better instructor and martial artist.
Taekwon
Neill Livingstone V Dan